R25E

T 25 N

PVC/HDPE Liner on Pit Floor
Graded & 12" NAG in 1999
Phase 2 Total Backfill
8" Soil
10" Ruby Tailings

ROSS PIT

NORTH RUBY SADDLE TOPSOIL STOCKPILE
Utilize
8" Soil

RUBY SULFIDE STOCKPILE
Removed in 2000-2001

SOUTH RUBY SADDLE TOPSOIL STOCKPILE
Used in 2000

SHELL BUTTE

SOUTH RUBY WASTE ROCK DUMP
Dump Removed in 2000-2001
8" Soil
10" Ruby Tailings

Excavate to Lower Road

COUNTY ROAD TO LANDUSKY

NORTH ALABAMA PIT
Total Backfill
8" Soil
10" Ruby Tailings

RUBY PIT
Total Backfill
Cap
10.07 ac PVC/HDPE
24.65 ac Fabric

MINT PIT
Total Backfill

1985 -1986 LEACH PAD
Remove Entire 85/86 Pad
Cover Pit & Pad Area With
8" Soil
10" Ruby Tailings
24" NAG

85/86 PAD DRAINAGE NOTCH
Cut Notch & Use Excavated Material To Build 85/86 Dike Buttress
18" Soil
6" Ruby Tailings
24" NAG

Excavate for Fill

O.K. PIT

Cover with 10" NAG+ 8" Soil

SOUTH ALABAMA PIT
Total Backfill
8" Soil
10" Ruby Tailings

82 TOPSOIL STOCKPILE
Used in 2000

O.K. WASTE ROCK DUMP
Salvage Soil
Grade to 3H:1V
8" Soil
10" Ruby Tailings

85/86 DIKE
Remove
8" Soil
10" Ruby Tailings

SEEPAGE COLLECTION SYSTEM
No Action

WATER TREATMENT PLANT
Relocate to Goslin Flats

REFINERY
Remove

WHITCOMB MILL
Remove

RUBY GULCH CAPTURE POND
No Action

RUBY GULCH PUMPBACK
Plumb to WTP on Goslin Flats
Reclaim

Remove Tailings
Stream Restoration
Sediment Control
Road Construction
8" Soil

1982 LEACH PAD

82 PAD SLOPE
Regrade to 2 1/2H:1V
18" Soil, 6" Ruby Tailings, 24" NAG

BARREN POND
Reclaim

Remove Bldg.
8" Soil 1 Ac.

DEGERSTROM SHOP

1982 SULFIDE STOCKPILE
Removed & Regraded in 2000-2001
8" Soil
12" NAG

82 POND

WTP POND

82 DIKE

89 DIKE
Additional Revegetation

1989 LEACH PAD
Reclaimed in 2000-2001

EAST TAILINGS STOCKPILE

WEST TAILINGS STOCKPILE

SLUDGE PIT
Backfill Sludge Pit
Regrade

1979-1981 LEACH PAD
Additional Revegetation

ALDER GULCH WASTE ROCK DUMP

Salvage Soil
Remove Entire Dump
10" Ruby Tailings
+ 8" Soil

CARTER GULCH

DEBRIS
Reclaimed in 2000-2001

1983 LEACH PAD
Reclaimed in 2000-2001

1984 LEACH PAD
Reclaimed in 2000-2001

83 DIKE
Additional Revegetation

84 DIKE
Additional Revegetation

ZORTMAN EMERGENCY GENERATOR
Relocate to Goslin Flats

RUBY GULCH TAILINGS

CARTER GULCH SEEPAGE CAPTURE SYSTEM
Remove and Reclaim

CARTER BUTTE

ALDER SPUR SEEPAGE CAPTURE SYSTEM
Plumb to WTP on Goslin Flats
Reclaim

ALDER SPUR

ZORTMAN GUARD SHACK AND GATE
Remove Shack and Gate
8" Soil

0 200 400 600 800
Scale in Feet

SOURCE: Spectrum Engineering 2001

Alternative Z5
Caps are defined as:
- Water Barrier
  - Flat: (<25% Slope)
    - 8" Soil
    - 10" Ruby Tailings
    - 24" NAG
    - PVC/HDPE Liner
  - Water Balance
  - Steep: (>25% Slope)
    - 8" Soil
    - 10" Ruby Tailings
    - Geotextile Filter Fabric
    - 12" NAG

R25E

ALTERNATIVE Z5: RECLAMATION GOAL IS TOTAL BACKFILL OF PITS AND HIGHWALLS.

# ZORTMAN MINE ALTERNATIVE Z5

FIGURE 2.4-7